



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,503	07/16/2003	Arno Schmuck	07244-00142-US	8515
23416	7590	05/20/2005	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ, LLP			PAIK, STEVE S	
P O BOX 2207			ART UNIT	PAPER NUMBER
WILMINGTON, DE 19899			2876	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/620,503

Applicant(s)

SCHMUCK ET AL.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Receipt is acknowledged of the Amendment filed February 22, 2005.

### ***Claim Objections***

2. Claims 1, 12, 14 and 17 are objected to because of the following informalities: the recitation, "fine structures" may be interpreted more than one ways, which is unclear. The examiner interprets that the teachings of cited prior arts are inclusive of the features of the chip being covered on both main surfaces with a seal or plastics layer and a recess of the core and/or a seal exhibit fine structures. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Haghiri-Tehrani et al. (US 4,617,216).

Re claims 1, 2, 9, 10 and 15, Haghiri-Tehrani discloses a card (Figs. 1-5) with a core (card core or card bed 11) and at least one chip (IC module 5) incorporated into the core (card core or card bed 11), characterised in that at least 5% of at least one main surface (cover films 12 and 13) is covered by a seal (laminating adhesive 17), the chip (IC module 5) is covered on both main surfaces (Figs. 1-5) with a seal or a plastics layer and a recess (cavity 14) of the core (11)

Art Unit: 2876

and/or a seal exhibit fine structures (Figs. 1-3). The at least one seal (laminating adhesive) consists of plastics (col. 3, ll. 50-53) and extends at no point to the edge of the card.

Re claim 3, Haghiri-Tehrani discloses the card (1) as recited in rejected claim 1 stated above, wherein the core comprises paper or plastics-coated paper (col. 3, ll. 50-60).

Re claims 4-6, Haghiri-Tehrani discloses the card as recited in rejected claim 1 stated above, wherein the core comprises at least one image-receiving layer/image forming layer (9 and 10 in Fig. 1) on at least one main surface. The image-receiving layer can be provided with various types of inscription properties that include a very fine pore.

Re claim 7, Haghiri-Tehrani discloses the card as recited in rejected claim 1 stated above, wherein the image-forming layer comprises a photographic layer (The fields 9 and 10 are provided for machine-readable and non-machine-readable embossed data.).

Re claim 8, Haghiri-Tehrani discloses the card as recited in rejected claim 1 stated above, wherein an image is arranged on the core (The core can be paper or plastic material. In a case where the IC card is used as an ID card, the fields 9 and 10 may be used for an image unique to the holder of the ID card.).

Re claim 11, Haghiri-Tehrani discloses the card as recited in rejected claim 1 stated above, wherein at least one seal (laminating adhesive 17) covers the recess (cavity 14) for the chip (IC module 5) on at least one side.

Re claim 12, Haghiri-Tehrani discloses the card as recited in rejected claim 1 stated above, wherein, the core (card core or card bed 11) characterized in that the core (11) contains at least one recess (14) with fine structure.

Art Unit: 2876

Re claim 13, Haghiri-Tehrani discloses the card as recited in rejected claim 12 stated above, wherein, the chip (IC module 5) is accommodated in the recess (cavity 14).

Re claim 14, Haghiri-Tehrani discloses the card as recited in rejected claim 1 stated above, wherein at least one seal (laminating adhesive 17) comprises fine structure.

Re claim 17, Haghiri-Tehrani discloses a process of producing a card (identification card 1) with a core (card core or card bed 11) and at least one chip (IC module 5) incorporated in the core (11), characterised in that a recess (cavity 14) for the chip is created in the core (11), the chip is inserted once the recess has been covered on one side with a seal (laminating adhesive 17; Fig. 3b) and then the opposite side of the recess is covered with a seal (laminating adhesive 17) or a plastic layer (cover films 12 and 13), wherein a recess (14) of the core (11) and/or the seal exhibit fine structures (Figs. 1-5).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haghiri-Tehrani et al. (US 4,617,216) in view of Launay (US 6,111,303).

The teachings of Haghiri-Tehrani et al. have been fully discussed above with the exception of the fine structures being selected from a group consisting of sawteeth, narrow strips,

Art Unit: 2876

small patterns, steps and combinations thereof and the fine structures having irregularities in the recess of the core and/or the seal.

Launay discloses a non-contact electronic card comprising a plurality of layers and a cavity (3). The cavity may have bumps at the bottom in order to provide an enhanced electrical contact between an integrated chip and conductive tracks. The shape of the bumps in the reference is cylindrical, but it is not limited to that only.

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have incorporated the cylindrical bumps at the bottom of a cavity as taught by Launay into the teachings of Haghiri-Tehrani et al. for the purpose of providing an improved electrical contact that results in accurate data exchanges between a non-contact electronic card and its reader.

#### ***Allowable Subject Matter***

7. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the cited prior arts discloses, teaches, or fairly suggests a card where the card is covered on both main surfaces with a plastic layer which projects beyond all the card's edges and the projecting margins of the two layers are welded together.

#### ***Response to Arguments***

8. Applicant's arguments filed February 22, 2005 have been fully considered but they are not persuasive. Re claims 1-15 and 17, the examiner maintains the rejection made on the

Art Unit: 2876

previous Office Action since the teachings of the prior art can still be read on the presently recited features. Claim 16 is now objected to since it includes an allowable subject matter for the reasons stated above. Newly added claims 18 and 19 are rejected under 35 U.S.C. § 103 (a).

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2876

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Steven S. Paik  
Primary Examiner  
Art Unit 2876

ssp